Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, in the application:

Listing of Claims:

1. (currently amended) Apparatus for forming an array of microneedle structures in a polymer material, said apparatus comprising a mold assembly including at least one bore therethrough having a cavity therein defining the shape of the finished microneedle shape to be formed therein, said bore having an inlet opening and an exit opening; means for locating the polymer to be formed at one end of said cavity; means for introducing fluid into said inlet opening of said bore and into said cavity; and exhaust means communicating with said exit opening of said bore, whereby introducing said fluid through said polymer causes said polymer to assume the shape of said cavity and said fluid forms a hollow channel to define a needle-like structure in said polymer as said fluid is exhausted through said cavity and said bore, and wherein said mold assembly includes upper and lower manifolds separated by a fluid-tight gasket disposed therebetween, and said mold forming cavity is in said upper manifold.

2. (cancelled)

3. (currently amended) The apparatus set forth in claim ~~2~~ 1, and further including a gas permeable membrane disposed between said gasket and said cavity with said polymer to be disposed above said gas permeable membrane.

4. (currently amended) The apparatus of claim ~~2~~ 1, wherein said lower manifold has a gas inlet communicating with an internal cavity that feeds to said at least one bore.

5. (currently amended) The apparatus of claim ~~2~~ 1 ,wherein the polymer is a UV-curable polymer and said upper manifold is formed with a transparent or translucent section to allow such polymer to be exposed to UV light while still in said mold cavity for curing said formed polymer.

6. (cancelled)

7. (cancelled)

8. (cancelled)

9. (cancelled)

10. (cancelled)

11. (cancelled)

12. (cancelled)

13. (cancelled)

14. (cancelled)

15. (previously presented) The apparatus of claim 1, wherein said gas permeable membrane is formed of a polyester fabric.

16. (previously presented) The apparatus of claim 1, wherein said gasket is in the form of a rigid strip of material having openings therein aligned with said bore and said cavity.

17. (previously presented) The apparatus of claim 1, wherein said gasket is comprised of a silicone rubber.

18. (previously presented) The apparatus of claim 1, wherein said structure defining said microneedle-shaped cavity further comprises a mold form disposed between said upper and lower manifolds and above said gas permeable member.

19. (cancelled)

20. (cancelled)

21. (cancelled)

22. (cancelled)

23. (cancelled)

24. (cancelled)

25. (cancelled)

26. (cancelled)

27. (cancelled)

28. (cancelled)

29. (cancelled)

30. (cancelled)

31. (cancelled)

32. (cancelled)

33. (cancelled)

34. (cancelled)

35. (cancelled)

36. (previously presented) An apparatus for forming an array of microneedle structures in a polymer material, said apparatus comprising a mold assembly having an upper manifold and lower manifold, each of said manifolds being adapted to be positioned in airtight relation relative to one another, the upper manifold having at least one cavity formed therein; at least one bore in said lower cavity feeding through to a bore in said cavity and through said upper manifold; an inlet port feeding said bore in said lower manifold; an exit port for exhausting said upper cavity via said bore in said upper manifold; a gas impervious gasket disposed between said upper and lower manifolds; a gas permeable membrane adapted to be positioned between said upper and lower manifolds.

37. (previously presented) The apparatus of claim 36, wherein said upper manifold includes a plurality of mold forming cavities therein, each of said mold forming cavities being configured to provide a microneedle-like structure therein, with the height of said needle being approximately 160 microns and having a base diameter of approximately 50 microns and the spacing of at least two of said microneedle assemblies being disposed approximately 300 microns from one another center-to-center.

38. (previously presented) The apparatus of claim 36, wherein the through hole or channel formed by said microneedle cavity is of a tapered configuration.

39. (previously presented) The apparatus of claim 38, wherein said gas permeable membrane is formed of a polyester fabric.

40. (previously presented) The apparatus of claim 38, wherein said gasket is in the form of a rigid strip of material having openings therein aligned with said bore and said cavity.

41. (previously presented) The apparatus of claim 38, wherein said gasket is comprised of a silicone rubber.

42. (previously presented) The apparatus of claim 38, wherein said structure defining said microneedle-shaped cavity further comprises a mold form disposed between said upper and lower manifolds and above said gas permeable member.

43. (cancelled)